1. Express product protein in tg milk

2. Express peptide affinity ligand/tag fusion in tg milk

Peptide affinity ligand

Tag P (CBD)

3. Blend tg milk streams, allowing tagged ligand to bind to product
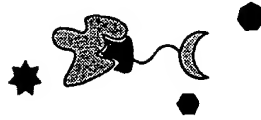
4. Affinity bind product/tagged ligand complex to Tag P-binding matrix

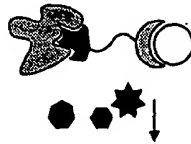5. Elute purified product. Recycle tagged ligand (if desired).

Figure 1

1. Express both product protein and peptide affinity ligand/tag fusion in same tg milk

2. Affinity bind product/tagged ligand complex to Tag P-binding matrix
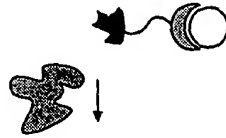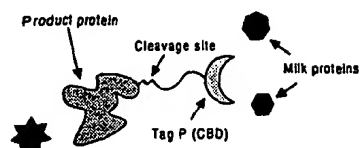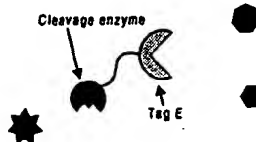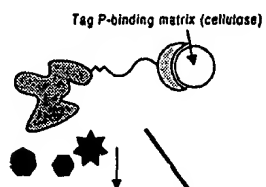
3. Elute purified product

Figure 2

1. Express product protein/tag fusion in tg milk

Product protein

Cleavage site

Milk proteins

Tag P (CBD)

2. Express cleavage enzyme/tag fusion in tg milk

Cleavage enzyme

Tag E

3. Affinity bind tagged product to Tag P-binding matrix

Tag P-binding matrix (cellulose)

4. Purify tagged enzyme on Tag E-binding matrix

Tag E-binding matrix

5. Cleave product off Tag P resin with tagged enzyme
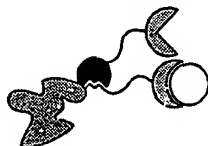
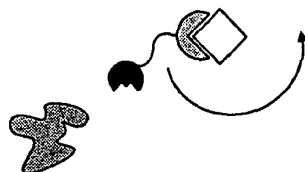6. Separate tagged enzyme with Tag E matrix. Recycle enzyme (if desired).

Figure 3